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CARE Steering Committee Meeting at CERN

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Abstract

ELAN activities and plans are presented to the CARE SC with particular emphasis on the ILC Global Design Effort recently launched by ICFA.

Acknowledgements

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News from ELAN

SC of CARE
CERN Apr 6 2005

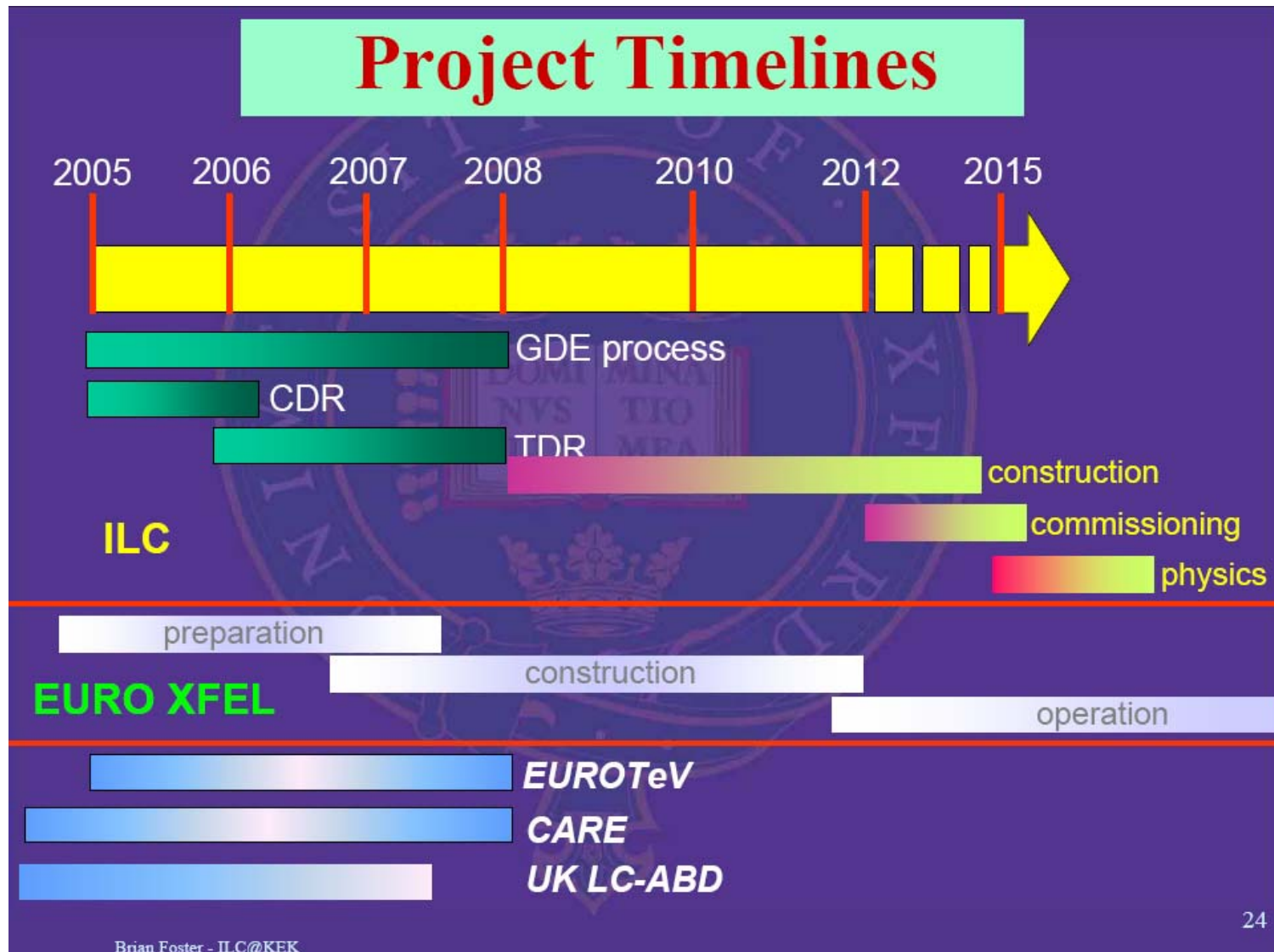


Stanford, California, USA 18-22 March, 2005

News from ILC

- At **LCWS05** (March at Stanford: 400 participants with MDI+ACCEL)
B. Barish has accepted to lead the GDE
<http://www.fnal.gov/directorate/icfa/>
Costing document due end of 2006
3 GDE regional Directors+costing engineers+30 CORE team (distributed)
- **Snowmass** meeting 2 weeks in August to reach ILC configuration
Physics (Aspen), Detector, Accelerator (after KeK)
- **EUDET**: I3 for detector 8.6 M€
- **ESFRI** priorities for FP7: acknowledges ILC among “Global projects”: http://www.cordis.lu/era/esfri_home.htm
 - International Large Collider (ILC)
 - Square Kilometre Array (SKA) – radio telescope –
 - International Fusion Materials Irradiation Facility (IFMIF)
 - ITER

ROADMAP shown at the KeK ILC meeting



ELAN Meetings in 2005

- Procedure: relevant European WS
+acknowledgement of ELAN support
(logo)

Document(s) ELAN issued

- List in

<http://esgard.lal.in2p3.fr/Project/Activities/Current/Networking/N2/ELAN/Workshops/>

- Support for international (ILC) meetings:
LCWS05 (MDI, ACCEL)+SNOWMASS

Workshops Supported by ELAN

2005		
<u>WIGGLE2005</u> - Mini-Workshop on Wiggler Optimization for Emittance Control	21 - 22 February	Frascati, Italy
<u>Metrology and Stabilisation</u> - for Linear Colliders Workshop	10 - 11 March	LAPP, Annecy le Vieux, France
<u>LCWS05</u> - International Linear Collider Workshop	18 - 22 March	Stanford, USA
<u>TESLA Collaboration Meeting</u>	30/3 - 1/4/2005	DESY, Germany
<u>Positron Sources for International Linear Collider</u>	11 - 13 April	Daresbury, UK
<u>HEEAUP2005</u> - International Workshp on High Energy Electron Acceleration Using Plasmas 2005	8 - 10 June	Institut Henri Poincaré, Paris, France
<u>ILC-BDIR</u> London Beam Delivery Systems	20 - 23 June	London, UK
<u>The 2005 International Linear Collider Physics and Detector Workshop and Second ILC Accelerator Workshop</u>	14 - 27 August	Snowmass, Colorado, USA

Avoid duplication with EUROTev

Program for a ½ day ELAN program

At the London ILC Meeting (June 20-23 2005)

Talk on GDE	Plans of the GDE	X	35+5
Talk on ELAN	Future plans of ELAN	FR	20+5
Talk on NC	CTF, PHIN, Alight meeting of Annecy GG		35+10
	Plans for Snowmass		
	Break	15 minutes	
Talk on SC	TTF,SRF,recent workshops	LL	35+10
	Plans for Snowmass		
Talk on ANAD	The Paris workshop, future plans	BC	35+10
Talk on DR	Frascati workshop	Maria Enrica Biagini (Frascati)	35+10
	Parallel sessions : WP6 only (SC RF)		

General comments : These talks are meant to be interesting for a general public, giving the general picture but also focusing on some well chosen items which have critical implications

Start:	Mon 20	Tue 21				Wed 22				Thu 23
0900	ELAN Plenary News	Laser-Wire MiniWS	WP1	WP10 /T3	WP11 /T6	WP2	WP4	WP5 /T5	WP7	WP1/T1
0930										WP2
1000										WP3
Break										
1100	ELAN Plenary News	Laser-Wire Mini Wkshp	WP1	WP10 /T3	WP11 /T6	WP2	WP4	WP5 /T5	WP7	WP4 /T4
1130										WP5/T5
1200										WP6
1230										WP7
Break										
1400-	B1 Intro	ATF2	WP3	WP6	WP12 /T7	WP1 /T1	WP4 /T4	WP8	WP9 /T2	WP8
1430	B2 Intro									WP9 /T2
1500	B3 Intro									WP10/T3
Break										
1600	B4 Intro	ATF2	WP3	WP6	WP12 /T7	WP1 /T1	WP4 /T4	WP8	WP9 /T2	WP11/T6
1630	B5 Intro									WP12/T7

ILC-BDIR + ELAN + EUROTev Workshop

F. Richard CARE/ELAN

TESLA Technology Collaboration Meeting April 2005

- We will have some homework assigned:

- Convenors of WG1+2 made a list of R&D topics for a next-generation cavity preparation infrastructure
 - <http://elan.desy.de> (ELAN SRF Work package)
 - and on the server with the talks for this meeting linked to either ilc.desy.de or tesla.desy.de

Cavity preparation	System		Topic	Needed R&D	Working parties
	Optical inspection	mandatory	QC	mass production issues	
	Dimensional inspection	mandatory		mass production issues	
	Frequency tuning	mandatory	QC	mass production issues	
	Cleanroom	mandatory	clean handling and assembly	QC issues	
				Procedures for personal	
				Adaption of the cleanroom to the product e.g. logistics	
				Cleanroom-compatible tooling	
				Tooling with semi-automation options	
	Ionized N ₂ cleaning	mandatory	component cleaning	mass production issues	
				automation desirable	
	Ultrasound	mandatory	component cleaning	mass production issues	
	Resistivity rinse	mandatory	component cleaning	mass production issues	
	Ultra-pure water system	mandatory	component cleaning	large-scale, redundancy	
				hot water rinsing	
	HPR	mandatory	final cavity cleaning	redesign after all the lessons learned	
				reliable operation, design for high throughput, redundancy, maintainability	
				online monitoring (TOC, Particles, Resistivity, sample port)	
				optimum parameters	

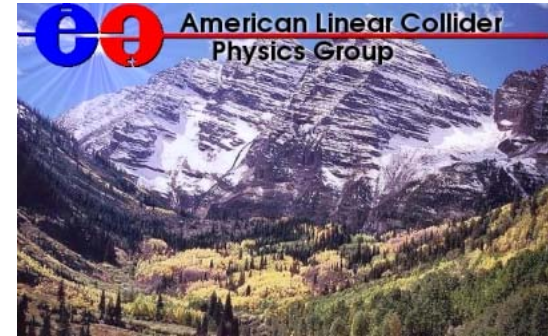
ELAN Money

- Under spent in 2004 mainly DESY INFN CERN 100k/168k
- More activity expected in 2005
- 254k requested for 18 months (+15 %)
- Concern with CNRS money (Comptable from University not accepted, 'Clause 23' allows UMR-Orsay to be considered as a contractor TG)

ELAN Management

- G. Blair has replaced S. Smith
Web page for INSTR

- Two non UE associates:
 - US: SLAC (M. Ross)
 - Israel: Technion (S. Tarem)



- Support for students for an ANAD school
in Scotland ?

- ANAD launching a NEST outline proposal

**EUROLEAP: European Laser Electron controlled
Acceleration in Plasmas to GeV energy range**

Conclusion

- After a first year with ‘centralized’ workshops we are moving to a more distributed organization to cope with the ILC and ANAD efforts
- There will be an ELAN dedicated meeting in London (BDYN-INSTR WS) and also an other one at the end of the year
- Priority to catch up on INSTR
- ELAN and EUROTev complementarities are carefully discussed
- Flexibility to cope with the ILC evolving situation

Participant (cost model)	Perman ent Staff includin g indirect cost (Euros)	Addition al Staff includin g indirect cost (Euros)	Durable Equipm ent includin g indirect cost (Euros)	Consum ables and Prototyp ing includin g indirect cost (Euros)	Travel includin g indirect cost (Euros)	Execute d costs includin g indirect cost (Euros)	Direct cost	Subcontr act	Indirect cost	Request ed funding (Euros)	
CEA(FC)	0	0	0	0	4 280	4 280	4 280	0	0	6 000	x
CNRS(FC)	0	0	0	0	29 282	29 282	24 402	0	4 880	31 500	x
DESY(AC)	0	0	0	0	24 210	24 210	20 175	0	4 035	47 250	x
FZJ(AC)	0	0	0	0	1 002	1 002	1 002	0	0	1 500	x
FZR(AC)	0	0	0	0	2 371	2 371	1 976	0	395	5 226	x
INFN(AC)	0	0	0	0	2 515	2 515	2 096	0	419	18 000	x
TEU(FC)	0	0	0	0	1 797	1 797	1 797	0	0	1 500	x
TUL(AC)	0	0	0	0	1 855	1 855	1 546	0	309	2 250	x
IPJ(AC)	0	0	0	0	2 646	2 646	2 205	0	441	2 250	x
WUT-ISE(AC)	0	0	0	0	0	0	0	0	0	2 250	x
CSIC(FC)	0	0	0	0	1 902	1 902	1 585	0	317	2 250	x
CERN(AC)	0	0	0	0	17 077	17 077	14 231	0	2 846	25 500	x
PSI(FC)	0	0	0	0	1 866	1 866	1 866	0	0	0	x
CCLRC(FC)	0	0	0	0	2 776	2 776	2 776	0	0	9 000	x
ICL(AC)	0	0	0	0	806	806	672	0	134	3 750	x
UMA(AC)	0	0	0	0	5 624	5 624	4 687	0	937	9 750	x
Grand total	0	0	0	0	100 009	100 009	85 296	0	14 713	167 976	

N°		Task Name	Début	2005				2006				2007		
				Tri 1	Tri 2	Tri 3	Tri 4	Tri 1	Tri 2	Tri 3	Tri 4	Tri 1	Tri 2	Tri 3
1		Review of network activity	Sam 01/01/05											
2		Annual Meeting	Lun 02/05/05											
3		Annual Report	Jeu 01/12/05											
4		Coordination with EUROTeV	Sam 01/01/05											
5		WP 1	Sam 01/01/05											
6		Progress on CTF3	Lun 03/01/05											
7		CTF3 Review	Lun 03/10/05											
8		CTF Proceedings	Lun 02/01/06											
9		Review of benchmarks and workplan	Sam 01/01/05											
10		Progress on LTECNC topics, incl. topics common with other WP	Lun 03/01/05											
11		Workshop on topical activity status	Ven 01/04/05											
12		Workshop report	Ven 01/07/05											
13		Workshop on topical activity status	Lun 03/04/06											
14		Workshop report	Lun 03/07/06											
15		Complementing data base and documentation	Ven 02/09/05											
16		Review of structure prototype results	Lun 02/01/06											
17		Review on sources including outcome of PHIN	Sam 01/01/05											
18		Report on status of sources	Ven 01/07/05											
19		Report on status of sources	Lun 03/07/06											
20		WP 2	Sam 01/01/05											
21		ILC Technology Development	Sam 01/01/05											
22		Monitor ILC preparation	Sam 01/01/05											
23		Coordinate Work together with EUROTeV	Sam 01/01/05											
24		Courses on SC technology at CERN Accelerator School	Lun 03/10/05											
25		Build Database for SRF	Sam 01/01/05											
26		MS: Database	Jeu 23/02/06											
27		Develop cavity reliability roadmap	Sam 01/01/05											
28		MS: Workshop (TESLA Meeting II)	Jeu 06/10/05											
29		Evaluation of quality control	Mar 01/02/05											
30		Evaluation of cleaning methods	Mar 01/02/05											
31		MS: Workshop (TESLA Meeting I)	Mar 07/06/05											

N°	Task Name	Début	2005				2006				2007		
			Tri 1	Tri 2	Tri 3	Tri 4	Tri 1	Tri 2	Tri 3	Tri 4	Tri 1	Tri 2	Tri 3
32	WP 3	Sam 01/01/05											
33	Identification of code extensions	Sam 01/01/05											
34	Definition of interfaces	Sam 01/01/05											
35	Workshop on Emittance preservation	Lun 04/04/05											
36	ID: Report	Lun 02/05/05											
37	Interactions on code extensions/interfaces	Mar 03/05/05											
38	EUROTeV / ELAN Workshop	Lun 05/12/05											
39	WP 4	Lun 03/01/05											
40	Coordinate R&D	Lun 03/01/05											
41	Create WWW site	Mer 01/06/05											
42	WP 5	Sam 01/01/05											
43	Monitor and coordinate studies on short pulse injectors	Sam 01/01/05											
44	Compare status of all-optical and RF injectors in view of recent progress	Sam 01/01/05											
45	ID: Report	Lun 03/04/06											
46	Extended plasma wave excitation	Sam 01/01/05											
47	Evaluate existing laser guiding techniques	Sam 01/01/05											
48	MS: Database	Lun 02/01/06											
49	ID: Document	Mar 03/01/06											
50	Identify optical diagnostics	Lun 03/01/05											
51	MS: Database	Lun 02/01/06											
52	ID: Document	Mar 03/01/06											
53	Electron beam focusing and transport	Lun 03/01/05											
54	Identify main issues	Lun 03/01/05											
55	MS: Workshop	Lun 01/08/05											
56	Coordinate European Proposals	Lun 03/01/05											
57	Meeting	Lun 04/07/05											
58	RTN proposal	Ven 02/09/05											